

## **Chapter Two LITERATURE REVIEW**

## 2. Literature Review

### 2.1. Theoretical Background

#### 2.1.1. *The Environmental Psychology of Multibrand Fashion Apps*

Rooted in environmental psychology, Mehrabian and Russell's (1974) Stimulus-Organism-Response (S-O-R) Model proposes that an individual's behavioral *response* to external environmental cues (*stimuli*) is facilitated by internal *organism states*.

Although seminal in nature, the model has been applied extensively in modern retail literature to study the effect of sensory and cognitive environmental cues on consumer behaviour such as fashion purchase intentions in both online and offline contexts (Watson, Alexander and Salavati, 2020; Tseng, Hsieh and Lee, 2021; Wadera and Sharma, 2019). Amongst its recent applications in digital environments, the model was used as an overarching foundation in the context of gamified shopping apps like Starbucks, McDonald's, MUJI, and Nike to examine the effects of gamified marketing strategies (Hsieh, Lee and Tseng, 2021; Tseng, Hsieh and Lee, 2021), and also as an underpinning theory to investigate effects of augmented reality solutions (Watson, Alexander and Salavati, 2020).

Limitations of such aforementioned studies, however, accentuate two major opportunities for further research. First, is the need to examine the effectiveness of the S-O-R framework in other digital environments, and second, is the need to validate the effectiveness of the model with different types of stimuli. As demonstrated in literature, pureplay multibrand shopping environments differ significantly from their single brand counterparts (Desmichela and Kocher, 2020). For example, rational (vs. intuitive) thought processes are accelerated as consumers move from in-store to online, and from single brand to multi-brand shopping with decreasing levels of hedonism in the shopping environment (Desmichela and Kocher, 2020). Thus, the present study aims to address the first scholarly limitation articulated earlier, by attempting to validate the S-O-R framework in a pureplay multibrand setting where its implications haven't been investigated before. In addition, while most of the marketing studies based on S-O-R have assessed different types of marketing strategies such as gamification or augmented reality as an external stimuli (Watson, Alexander and Salavati, 2020; Hsieh, Lee and Tseng, 2021), to the best of the author's knowledge, none have previously examined agile marketing. Thus, this research also addresses the second limitation by seeking to validate the S-O-R framework using AMCs as a novel stimuli.

As asserted by Mehrabian and Russell (1974), the process of eliciting a behavioral outcome from an external stimulus is facilitated by the organism's internal emotional states classified as pleasure, arousal, and dominance (PAD) (Hsieh, Lee and Tseng, 2021). Effectiveness of app marketing stimuli on desired consumer behaviour has previously been investigated with various mediating and moderating effects. For example, customer engagement can mediate relationships between shopping gamification and intention to buy (De Canio, Fuentes-Blasco and Martinelli, 2021), extrinsic motivators and app continuance (Tseng, Hsieh and Lee, 2021), and anthropomorphism and app continuance (Lim *et al.*, 2021); customer satisfaction can mediate the dynamic between gamification and brand love (Hsu and Chen, 2018) ; previous shopping experience can moderate the path between engagement and purchase intentions (De Canio, Fuentes-Blasco and Martinelli, 2021). However, despite the significance of emotional factors, research demonstrating their mediating effects on desirable consumer behaviour is relatively underdeveloped (Hsieh, Lee and Tseng, 2021). Hence, this study builds on foundations of environmental psychology using Mehrabian and Russell's (1974) Pleasure-Arousal-Dominance (PAD) model, to examine the mediating role of dimensions of consumer psychology in driving consumer's repurchase intentions.

#### 2.1.2. *AMCs as Environmental Stimuli*

Drawing from a combination of agile software development and lean start up methodologies, agile marketing was initially conceptualized as the Agile Marketing Manifesto in June 2012 (Ewel, 2020). Formally defined by the pillars in its manifesto (see appendix A 3.1.), in essence agile marketing is about swiftly creating and delivering value in response to the rapidly changing consumer demands, market dynamics, and competitive landscape (Hagen, Zucchella and Ghauri, 2019; Moi and Cabiddu, 2020). For the purpose of this research AMCs shall be defined in line with Guo et al. (2018), as '*the extensible ability to proactively sense and act on market signals, continuously learn from market experiments, and integrate and coordinate social network resources to adapt to market changes and predict industry trends*' (Moi and Cabiddu, 2020).

Despite its merits in achieving depth of research for a particular niche, literature surrounding agility in the marketing domain however, is limited to exploratory inductive approaches, possibly due to the novelty of this research area (Hagen, Zucchella and Ghauri, 2019; Moi and Cabiddu, 2020). For example, while Moi and Cabiddu (2020) present a theoretically

sound AMC framework identifying four broader agile capabilities (adaptability, collaboration, continual innovation, and forecasting), their findings are limited to a single case study about a digital home-rental business with no direct link to fashion. Hagen, Zucchella and Ghauri (2019) too, provide a comprehensive theoretical framework highlighting flexibility and selective responsiveness as two major agile business practices. However, despite considering a greater number of cases (three digital start-ups) and an additional non-digital business to enhance generalizability, three out of the four firms chosen, come from Italian origins with limited international exposure and hence limited reliability. Moreover, none of the cases selected show a direct association with fashion (Hagen, Zucchella and Ghauri, 2019). While the purposive sampling undertaken in both the aforementioned studies seems likely to have enhanced credibility through a selection of highly relevant, agile-centric firms, it may have potentially resulted in some form of researcher bias (Bryman and Bell, 2011). Thus, the present research aims to build on the depth of findings from such studies and enhance their reliability by investigating AMCs in different industrial and geographical contexts using a quantitative approach with zero to minimal researcher bias. In addition, the present study also delivers the much required and previously unexamined consumer perspective on marketing agility (Hagen, Zucchella and Ghauri, 2019; Moi and Cabiddu, 2020).

The pureplay multibrand fashion domain of this study provides a suitable background to empirically operationalize and test the effectiveness of AMCs in eliciting desirable consumer responses, since core fashion consumers are demanding ‘always-on brands’ to attend to their needs 24/7 (Kotler, Kartajaya and Setiawan, 2021). Based on the qualitative characterization of agile marketing (Table 3.), and antecedents of app usage continuance identified in extant literature (Table 4.), this research operationalizes the environmental stimuli of AMCs in multibrand fashion apps using five dimensions namely – *Newness of Assortment, Transparent User Experience, Ubiquity, Personalization, and After-Sales Service* (further discussed in section 2.2). Since each of these lower order dimensions have been empirically tested in previous findings (Hsieh, Lee and Tseng, 2021; Lim *et al.*, 2021), their adaptation can contribute towards enhancing the reliability of this research and also test their validity in a different context.

Table 3: Characterization of Agile Market from extant literature. "Customer Centric Elements" discussed in the last column refer to dimensions of agile marketing that could be quantified from a consumer perspective for this study.

Authors	Characterization of Agile Marketing	Customer Centric Elements (Relevant for this study)
Ewel, J. (2020)	<b>The Six Disciplines of Agile Marketing</b>	
	• Alignment – Aligning marketing goals with the rest of the business goals and customer expectations	
	• Structure – Collaborative, cross functional teams	
	• Process Management – Applying process like Scrum and Kanban to manage marketing	
	• Validated learning – Practicing rapid iteration, testing, and multiple experiments to constantly learn from data	
	• <b>Adapting to change</b> – Adapting to changes in marketplace, competitive landscape, consumer behaviour. Responding to disasters and opportunities.	✓
Kotler, P., Kartajaya, H. and Setiawan, I. (2021)	• <b>Creating remarkable consumer experiences</b> – Consumer experience is the 'ultimate outcome' which lies at the 'heart of agile marketing'.	✓
	<b>Key Components for Developing Agile Marketing</b>	
	• Real time analytics capabilities- capture customer data to monitor changes in real time.	
	• Decentralized teams – multiple, small, cross functional teams assigned to specific timeboxed tasks.	
	• <b>Flexible product platform</b> – products that are well integrated and continuously upgraded, with each iteration delivering a usable output equipped with customization capabilities.	✓
	• Concurrent Process- different stages of a marketing plan run in parallel as opposed to running sequentially.	
Moi, Cabiddu (2020)	• Rapid Experimentation – Instead of pre-launch testing, Minimum Viable Products (MVPs) are sold to real customers in line with lean start up methodologies.	
	• <b>Open Innovation</b> – leverage internal and external opportunities for innovation such as customer co-creation and third party collaboration.	✓
	<b>The Agile Marketing Capability Framework</b>	
	• <b>Adaptability and flexibility towards changing customer needs and international settings.</b>	✓
	• Integrated teams working in collaborative environments	
Hagen, Zucchella, Ghauri (2018)	• <b>Continual, fast-paced innovation</b>	✓
	• <b>Forecasting and monitoring</b> needs of the market by anticipating and fulfilling customer expectations	✓
	<b>Reconceptualization of Strategic Agility (driven by Marketing)</b>	
	• <b>Flexibility</b> - Being flexible enough to respond with speed and save time with respect to customer demands, stakeholder requirements, and management of resources.	✓
	• <b>Selective Responsiveness</b> – Create value by responding to customer's hidden and unsatisfied requirements. Undertake experimentation to test innovative opportunities in business development	✓

### 2.1.3. *Continuity of Fashion Apps: Repurchase Intentions*

While some previous studies contextualize app usage continuance in the form of 'continued usage intention' (Hsieh, Lee and Tseng, 2021) or 'app continuance' (Tseng, Hsieh and Lee, 2021), for the purpose of this research continuance shall be represented by consumer's 'repurchase intentions' (Antwi 2021; Ali and Bhasin, 2019; Chiu et al., 2014; Liang, Choi and Joppe, 2018). This is because, in addition to other reasons for continued app usage (like browsing and price comparison), repurchase intentions encapsulate a transactional element critical to sustaining the business of multi brand fashion apps.

According to Bhattacharjee (2001), factors driving continued usage of a technological system (in this case multi brand fashion apps) differ from factors driving its initial adoption. Continuity in consumer behaviour is influenced by the extent of user's confirmation towards an initial expectation from the service, the perceived usefulness (i.e., level of expectation formed after initial acceptance) of the technology after, and satisfaction with previous experience of using the technology. In line with Bhattacharjee's (2001), Expectancy Confirmation Model, McLean *et al.* (2019) affirm that although models based on technology acceptance (Davis, 1989) are relevant in the initial adoption phase, the strength of variables influencing the initial acceptance of mobile applications like perceived ease of use, perceived usefulness, customization, and enjoyment, differs significantly with an app's continued usage. This also aligns with previous research (Venkatesh *et al.*, 2003; Groß, 2016) which suggests that the factors influencing the primary acceptance of technology are likely to vary in level of importance across its continued acceptance as consumers' perceptions about a product/service shift from external sources of information to their own experience of using it.

However, despite its merits in understanding continuance intention, research on technology continuance, often neglects the effect of consumer's intrinsic motivations (with the exception of customer satisfaction) (Kim *et al.*, 2014; Wu, Liu and Cui, 2021). In doing so, it neglects other findings which in fact, highlight the significance of factors such as user engagement (De Canio, Fuentes-Blasco and Martinelli, 2021; Tseng, Hsieh and Lee, 2021) and hedonistic patterns of consumption (Hsu and Chen, 2018), in driving desirable consumer behaviour. Therefore, by employing the PAD model (Mehrabian and Russell, 1974), this study includes an emotional aspect for studying app usage continuance to address limitations regarding neglect of intrinsic motivation articulated in academia.

Table 2. provides an overview of the reviewed literature to illustrate the antecedents and mechanism of desired consumer behaviour (outcome) examined in various E-Commerce and M-commerce domains. It also illustrates the research gap (multibrand fashion apps and agile marketing) which the present study aims to bridge.

*Table 4: Summary of the literature reviewed, explaining the various antecedents, mechanisms, and outcomes of consumer behaviour on mobile apps or E-Commerce platforms. All data has been sourced and complied by the author. Last two columns specifically indicate the research gaps in the context of pureplay multibrand fashion apps and AMCs as relevant for this study.*

Author	Antecedents	Mechanism	Outcome	Context	Theory	Findings	Multibrand Fashion App Context?	Potential AMC Dimensions
<b>Present Study</b>	<b>Agile Marketing Capabilities</b>	<b>Pleasure, Arousal, Dominance</b>	<b>Repurchase Intentions</b>	<b>Multibrand Fashion apps in U.A.E</b>	<b>Environmental Psychology consisting of S-O-R and PAD Framework (Mehrabian and Russell, 1974)</b>		<b>Yes</b>	<b>Newness of Assortment, Transparent UX, Ubiquity, Personalization, and After Sales Service</b>
<b>(Ali and Bhasin, 2019)</b>	Perceived Price, Delivery Quality,	Customer Satisfaction, Perceived Value	Repurchase Intention	General E-Commerce in India	Information Systems Success Model (DeLone and McLean, 1992), Belief-Attitude-Behaviour Model and TAM (Davis, 1989; Davis, Bagozzi and Warshaw P., 1989)	Price and Delivery Quality had significant effect on Perceived Value, but not on Customer Satisfaction. Perceived value had significant effects on Repurchase intention directly and through Customer Satisfaction.	No	Delivery Quality
<b>(Antwi, 2021)</b>	Customer Trust, Customer Commitment, Customer Satisfaction	Price Level	Repurchase Intention	Online retailers in Ghana	Relationship Marketing	Customer trust positively affects repurchase intentions and price level. Customer commitment has a significant positive effect on price level and repurchase intentions. Customer Satisfaction had significant positive effect on Price Level but not on Repurchase Intentions.	No	None

<b>(Chiu et al., 2014)</b>	Utilitarian Benefits, Hedonic Benefits	Utilitarian Value, Hedonic Value, Perceived Risk	Repeat Purchase Intention	Yahoo! Kimo E-Commerce store in Taiwan	MEC (Gutman, 1997), Prospect theory (Kahneman and Tversky, 1979)	Utilitarian value is a stronger predictor of repeat purchase intentions than hedonic value.  Perceive risk as a weak negative effect on repeat purchases. Perceived risk negatively moderates effect of utilitarian value and positively moderates the effect of hedonistic value (so they need to be aroused) on repeat purchases.	No	Utilitarian benefits
<b>(McLean et al., 2019)</b>	Perceived ease of use (EOU), Perceived Usefulness, Enjoyment, Subjective Norm, Customization	Attitude towards m-commerce app, Attitude towards the brand, Loyalty towards the brand, Screen Size	Purchase Frequency	Apparel m-commerce apps in UK	Expectancy Confirmation Theory of Information Technology (Bhattacharjee, 2001)	Following initial adoption, Customization, Enjoyment, Perceived EOU, and Perceived usefulness influence attitude towards the app with continued usage. Subjective norms do not affect attitude towards app with usage continuance.  Attitude towards the brand influences Loyalty, attitude towards brand and Purchase Frequencies with continued usage. Attitude towards brand, and purchase frequencies are not affected during initial adoption phases.	Yes (Partially)	Customization
<b>(Hsieh, Lee and Tseng, 2021)</b>	Ubiquity, Personalization, Informativeness, Entertainment, Aesthetic Design, Gamification	Dominance, Pleasure, Arousal	Continuous Usage Intention, Brand Loyalty	Gamified apps: Starbucks, Nike (Nike Run), Under Armour (My Fitness Pal)	S-O-R and PAD Models (Mehrabian and Russell, 1974)	All three emotional factors-P, A and D influence brand loyalty and continuance intention. Dominance is driven by Ubiquity, Personalization, and informativeness, Pleasure by Aesthetics and Entertainment, and Arousal by Gamification.	No	Ubiquity, Personalization, Informativeness
<b>(De Canio, Fuentes-Blasco and Martinel li, 2021)</b>	Shopping Gamification, Focused Attention, Shopping Enjoyment, Socialness	Shopping Engagement, Previous Shopping Experience	Intention to buy	WeChat app in China	Technology Acceptance Model (TAM) (Davis, 1989), Theory of Reasoned Action (Fishbein and Ajzen, 1980)	Shopping Gamification, Focused Attention, Shopping Enjoyment, Socialness positively effect Engagement. Shopping Engagement and Previous shopping experience affects Intentions to buy. Previous shopping experience also moderates engagement and intention to buy pathway.	Yes	None
<b>(Lim et al., 2021)</b>	Anthropomorphism Presence (AP) and Marketing Mix (higher order constructs)	Customer Engagement (CE), Prevention Focus, Promotion focus	Continuance Use Intention	Millennial Retail app (Shopee, Taobao, Lazada, Uniqlo, HnM, etc.) shoppers in Malaysia	Two factor theory (Herzberg, 1987), Regulatory Focus Theory (Higgins, 1998)	AP did not affect continuance directly but indirectly via Customer engagement. MM influence app continuance. CE was the strongest predictor of continuance. AP is stronger predictor of CE than MM. CE Mediates the relation between MM, AP and Continuance. MM-CE path is stronger for	Yes (Partially)	Product Assortment, Transparency, Aftersales Service



						prevention-focused consumers.		
(Hsu and Chen, 2018)	Experience of Gamification of Marketing Activities (GMAs)	Hedonic value (HV), Utilitarian value (UV), Satisfaction, Brand Love	Brand Loyalty, Positive WoM, Resistance to negative information	Online bookstore in Taiwan	Technology acceptance (Davis, 1989), Continuous Usage Intentions (Bhattacharjee, 2001), Hedonic and Utilitarian Patterns of Consumption.	Experience of GMAs positively affects HV and UV. HV and UV have a significant positive effect on Customer satisfaction-after sales UV will drive Satisfaction and Brand love. Brand love drives loyalty, Positive WoM and Resistance to negative information.	No	Utilitarian Value
(Tseng, Hsieh and Lee, 2021)	Symbolic benefits, Incentive provision, Goal Clarity, Design Aesthetics, Playability	Consumer Brand Engagement - Cognition, Affection, Activation	App Continuance Intention, Purchase Intention, Brand Loyalty	Multiple gamified apps: McDonald's, MUJI, Starbucks, Nike, Family Mart, 7-11, Eslite, O-Bank	S-O-R (Mehrabian and Russell, 1974), Elemental Tetrad Model (Schell, 2008)	Symbolic benefits, Incentive provision, Goal Clarity, Design Aesthetics, and Playability drive Consumer brand Engagement which in turn facilitates App Continuance Intention, Purchase Intention and Brand Loyalty	No	None
(Kim et al., 2016)	Perceived ubiquity, Informativeness, Personalization	Perceived Usefulness, Engagement	Mobile App Stickiness, WOM	Gamified food and shopping Apps	Technology Acceptance Model (TAM) (Davis, Bagozzi and Warshaw P., 1989)	App stickiness is influenced by app usefulness and app engagement. Usefulness is influenced by ubiquity, informativeness, and personalization.	No	Ubiquity

## 2.2. Hypothesis Development

### 2.2.1. Operationalization of AMCs

Since AMCs are a relatively abstract concept, it may not be justified to measure them with a definite set of indicators (Bryman and Bell, 2011). As illustrated in previous exploratory studies (Table 3.), AMCs may comprise of various dimensions depending on the context they are being evaluated in. Each of these aspects or dimensions can then be measured using a set of indicators available from literature or designed based on theory (Bryman and Bell, 2011). Building on the qualitative characterization of AMCs in extant literature and previously tested precursors of app continuance and/or repurchase intentions (Tables 3 and 4.), this

study operationalizes AMCs as a multidimensional concept comprising of the following five aspects:

- i. ***Newness of Assortment:*** The fashion industry by nature is characterized by changing trends. Therefore, the ability to forecast (Moi and Cabiddu, 2020), and turnover maximum designs in a limited profit timeline, reflects a multibrand app's agility towards changing consumer tastes and requirements (Kotler, Kartajaya and Setiawan, 2021). With several pure players competing for market share by selling similar high street brands and product lines, newness of assortment can enable multi brand apps to stand out and stay ahead of the curve. Adapted from Lim *et. al*'s (Lim *et al.*, 2021) 'assortment' construct, 'newness of assortment' denotes a multibrand app's variety of inventory in terms of new brands, trendy product lines, and inclusion of new colors, sizes, and styles.
- ii. ***Transparent User Experience:*** As stated by Ewele (2020), customer experience lies at the heart of agile marketing. In line with this, findings from Hsieh, Lee and Tseng (2021) and Lim *et. al* (2021) also affirm the significance of app marketing stimuli such as 'informativeness' and 'channel transparency' in creating an effective shopping experience. Based on these two constructs, 'transparent user experience' signals a multi brand app's ability to constantly update the consumers with latest real time analytics at every stage in the consumer journey – such as accurate descriptions before purchase and order tracking at every stage of delivery.
- iii. ***Ubiquity:*** Agile brands are those which are able to swiftly cater to their consumer's demands 24/7 (Kotler, Kartajaya and Setiawan, 2021). By living on a user's device, the ubiquitous nature of m-commerce enables multibrand apps to achieve such agility with the help of flexible product platforms (mobile apps) capable of attending to the consumer's needs anytime, anywhere (Kim *et al.*, 2016; Hsieh, Lee and Tseng, 2021). Therefore, in terms of an app's agility, ubiquity signifies its ability to grant users the access to products and services anytime, anywhere.
- iv. ***Personalization:*** One of the chief characteristics of agile marketing is the ability to monitor user preferences and translate real time analytics into value creation for the consumer (Ewel, 2020; Moi and Cabiddu, 2020). Personalization tactics such as remarketing ads based on products in a user's wish list, or tailored emails based on

user's purchase history enable value creation by staying on top of customer preferences (McLean *et al.*, 2019; Hsieh, Lee and Tseng, 2021), and therefore demonstrate an app's agility towards sensing and predicting consumer behaviour.

- v. ***After-Sales Service:*** In line with Hagen *et. al's* (2019) findings, flexibility and responsiveness surface as critical factors for agility. Within the domain of multi brand fashion apps, these factors can be extrapolated to the apps' after sales service (Lim *et al.*, 2021). In order to reflect agile capabilities, an app's after-sales service needs to be characterized by speed, flexibility, and efficiency . Therefore, fashion marketers can impart agility to their mobile platforms by increasing 'flexibility and selective responsiveness' towards various after-sales queries such returns, refunds, and exchanges (Hagen, Zucchella and Ghauri, 2019).

Using the five dimensions discussed above this study hypothesizes the existence of relationships between the various AMCs, consumer's organism states, and repurchase intentions using the S-O-R framework as the overarching theory.

### *2.2.2. Antecedents of Pleasure, Arousal, and Dominance*

#### *2.2.2.1. Antecedents of Arousal*

In environmental psychology, arousal is predominantly associated with feelings of excitement, alertness, or activation, upon being stimulated by any external factor(s) (Mehrabian and Russell, 1974; Hsieh, Lee and Tseng, 2021). Existing literature examines antecedents of arousal directly and indirectly. For example, while Hsieh, Lee and Tseng (2021) observe the effects of branded app atmospherics directly on the arousal construct, other studies examine the role of app marketing elements on the construct of consumer engagement. In case of the latter, consumer engagement can be linked to arousal by drawing a parallel between the stimulating aspects of both these constructs. Therefore, considering the correlations between assortment and consumer engagement, and between personalization and arousal, established in previous literature (see Table 4.), this study proposes the existence of a positive impact of two AMCs- newness of assortment and personalization, on arousal.

### *Newness of Assortment and Arousal*

Research suggests that fashion consumers feel engaged and excited by the depth and variety of product offerings in an app's marketing mix (Lim *et al.*, 2021). Shoppers are also attracted by the 'trending' factor, especially in a digital context where new trends are made available every day on their fingertips (Djafarova and Bowes, 2021). Being stimulated by newness of assortment can also be viewed as a form of hedonic value and shopping enjoyment both of which have a positive effect on repeat purchases (Chiu *et al.*, 2014; McLean *et al.*, 2019). Therefore, considering the agile aspect of trendiness and the previously confirmed effects of marketing mix on engagement, (which in turn drives app continuance) this study hypothesizes the following:

**H1:** Newness of assortment is positively associated with feelings of arousal.

### *Personalization and Arousal*

Hsieh, Lee and Tseng (2021) affirm that personalization indirectly influences continuance usage intentions of gamified apps. This aligns with findings from other studies which illustrate positive correlations between similar constructs such as customization (McLean *et al.*, 2019), perceived personalization (Kim *et al.*, 2016), anthropomorphism (Lim *et al.*, 2021), and repeat purchases. However, while Hsieh, Lee and Tseng (2021) examine the mediating role of dominance, Kim *et al.* (2016) and Lim *et al.* (2021) postulate customer engagement as the intermediary facilitating the outcomes from personalized activities. Although appropriate in Hsieh, Lee and Tseng 's (2021) context of gamification , where personalization can indeed establish a greater sense of control, this might differ in the case of multibrand fashion apps. Considering the agility of such apps, personalization via remarketing ads, push notifications and recommendations based on purchase history, happens mostly outside the user's control. Although it is up to the user to opt-in for such tactics, once opted for, personalization agility is more about stimulating attention (arousal) than activating sense of control. (The control in fact lies in hands of marketers who decide on the medium and time which will most excite a consumer for personalized push). Hence, this study proposes that personalization in multibrand apps is linked more with arousal (than dominance), as suggested by Kim *et al.* (2016) and Lim *et al.* (2021). This leads to the following hypothesis:

**H2:** Personalization is positively associated with feelings of arousal.

#### 2.2.2.2. Antecedents of Dominance

The dominance aspect of the PAD model signifies a 'sense of control' within the consumer's mindset (Mehrabian and Russell, 1974). High levels of dominance can be considered equivalent to reduced levels of risk and uncertainty. According to Chiu et al., (2014) perceived risk *negatively* moderates the path between utilitarian benefits and repeat purchases. Therefore, *if perceived risk is low* (i.e., *dominance is high*), utilitarian features are likely to drive more purchases. Since transparency and ubiquity provide certain utilitarian benefits such as convenience and product information (Chiu et al., 2014), this study proposes that dominance will facilitate the path between AMCs and repurchase intentions for Transparent User Experience and Ubiquity.

#### *Transparent User Experience and Dominance*

This study characterizes 'transparent user experience' as an app's ability to promptly provide customers with precise real time information about their purchases. According to Lim et al. (2021) and Ali and Bhasin (2019), channel transparency and delivery quality (encompassing timely and accurate logistics, online tracking, order changes and cancellations) have an indirect positive influence on app continuance and repurchase intentions. Considering that informativeness is a part of a channel's transparency, these findings are also in line with Hsieh, Lee and Tseng 's (2021) study which is one of the few to have affirmed the correlation between informativeness and dominance in the realm of app continuance. Kim et al. (2016) too, demonstrate the indirect effects of perceived informativeness on app stickiness. However, to qualify as agile, informativeness should be able to combine static descriptions (about products, services, promotions, etc.) with dynamic real time updates. Given the intangible nature of mobile shopping, such functional agility reduces user's perceived risk and uncertainty (Chiu et al., 2014), thereby increasing control over the shopping experience (Hsieh, Lee and Tseng, 2021). Thus, this research hypothesizes the following:

**H3:** Transparent user experience is positively associated with feelings of dominance.

#### *Ubiquity and Dominance*

Extant literature highlights the 'anywhere, anytime' ubiquitous nature of mobile phones as one of the most significant aspects of m-commerce (Balasubramanian, Peterson and Jarvenpaa, 2002; McLean et al., 2019). According to Kim et al. (2016), perceived ubiquity is

one of the strongest precursors of app usefulness, which in turn leads to increase app stickiness. Hsieh, Lee and Tseng (2021) also conform to these findings by establishing ubiquity as an indirect predictor of app continuance, mediated by dominance. Both these studies however do not specifically examine ubiquity in the context of agility of pureplay multibrand retailers.

In terms of agile capabilities, the ubiquity of mobile apps allows pureplay multibrand retailers to be omnipresent, thereby saving time and imparting 'spatial flexibility' to the platform (Kim *et al.*, 2016; Hagen, Zucchella and Ghauri, 2019; Moi and Cabiddu, 2020). Perceived ubiquity imparts various utilitarian benefits such as 'continuity, immediacy, portability, and searchability' (Hsieh, Lee and Tseng, 2021). Considering that utilitarian benefits are likely to drive purchase frequencies when perceived risk is low (Chiu *et al.*, 2014), the ubiquitous capabilities of mobile shopping, such as geo-marketing, global shipping, and on-demand deliveries can therefore behave as environmental stimuli to minimize uncertainty and build a sense of control over one's consumer journey. Hence, this study proposes the following:

**H4:** Ubiquity is positively associated with feelings of dominance.

#### 2.2.2.3. Antecedent of Pleasure

The dimension of pleasure is associated with feelings of joy, happiness, and satisfaction with the environment (Mehrabian and Russell, 1974). Fashion consumers are largely motivated by hedonistic values (Desmichela and Kocher, 2020). In app marketing too, hedonic features such as aesthetics and entertainment have been directly linked to feelings of pleasure (Hsieh, Lee and Tseng, 2021). However, other literature around retail apps articulates that in addition to hedonic values, utilitarian values too contribute to customer satisfaction (pleasure) (Parker and Wang, 2016; Hsu and Chen, 2018). This is because mobile apps have limited experiential scope, and therefore focus largely on utilitarian features to induce engagement (Parker and Wang, 2016).

#### *After-Sales Services and Pleasure*

Considering AMCs as a utilitarian environmental cue, this study proposes that agility in after-sales services is likely to induce feelings of pleasure. After-sales services can be defined as the provision of services that follows after a particular purchase from a retailer (Lim *et al.*, 2021). By ensuring timely technical support, swift replacement of unsatisfactory (e.g.,

damaged, defective, or incorrect) goods, post-purchase monetary services (such as refunds, returns, or exchanges), warranties, and proof of authenticity, multi brand fashion apps can cultivate a stronger bond with their consumers (Lim *et al.*, 2021). Therefore, agile after-sales services can be considered to provide utilitarian benefits which, (as discussed earlier), can in turn increase customer satisfaction and hence, pleasure (Hsu and Chen, 2018). In line with this, the study hypothesizes the following:

**H5:** After-sales services are positively associated with feelings of pleasure.

### 2.2.3. *Outcome of Pleasure, Arousal, and Dominance*

Consumer behaviour or 'response' is the final stage in the S-O-R framework. Based on the establishment of the three emotional states of PAD, an individual is likely to either continue engaging with an environment or avoid it entirely (Mehrabian and Russell, 1974).

While few studies have assessed the behaviour-determining role of *arousal* in particular, several have empirically tested the positive effect of *customer engagement* on continuity of mobile apps (Kim *et al.*, 2016; Hsieh, Lee and Tseng, 2021; Lim *et al.*, 2021; Tseng, Hsieh and Lee, 2021). In these studies, usage continuity arising from customer's engagement has been measured using various constructs such as mobile app stickiness, app continuance intention, and continuous usage intention. If consumer's interest is piqued by an app's agility in terms of providing trendy assortments and personalized content/ advertisement, they may be inclined to return to an app for more purchases. Therefore, drawing a parallel between the stimulating aspects of engagement and arousal, this study proposes that arousal will contribute positively towards consumer's repurchase intentions.

Hsieh, Lee and Tseng (2021) affirm the mediating effects of dominance in driving app continuance of gamified branded apps. However, even if an online environment is non-gamified, previous research demonstrates that having an increased sense of control can lower uncertainty and enhance satisfaction, which in turn leads to repeat purchases (Weathers, Sharma and Wood, 2007; Ali and Bhasin, 2019). In the case of pureplay fashion apps, users have no access to physical trials or sales advisors in order to make concrete decisions. Therefore, inducing a sense of control by other elements such as transparency and ubiquity, can increase consumer confidence, thereby leading to repeat purchases (Hsieh, Lee and Tseng, 2021) .

Previous studies have examined the effects of various forms of pleasure such as enjoyment, brand love, and satisfaction on consumer behaviour. For example, De Canio, Fuentes-Blasco and Martinelli (2021) affirm the role of enjoyment in driving purchase intentions, McLean *et al.*, (2019) articulate the effects of enjoyment on repurchase intentions, and Chiu *et al.* (2014) ascertain the role of brand love in driving loyalty. In terms of customer satisfaction however, while Ali and Bhasin's (2019) study asserts a positive correlation with repurchase intentions, Antwi's (2021) findings show that satisfaction doesn't significantly impact repurchase intentions. Though both studies had similar number of responses, a plausible explanation for this contradiction could be the differences in samples' geographies, use of different scales to measure satisfaction, and self-selection bias (such as non-response) which was not quantified in either of these studies. According to Hsieh, Lee and Tseng (2021), however, there exists a direct positive influence of pleasure on app continuance. This is also in line with Bhattacharjee's (2001) EC theory of IS continuance which signifies the role of satisfaction in driving continuance of information systems. Thus, this study proposes that pleasure is positively related to repurchase intentions.

Based on the above links between the emotional states of PAD and repeat purchases, this research postulates the following set of hypotheses:

- H6a:** Feelings of arousal have a positive influence on repurchase intentions.
- H6b:** Feelings of dominance have a positive influence on repurchase intentions.
- H6c:** Feelings of pleasure have a positive influence on repurchase intentions.



#### 2.2.4. Proposed Conceptual Framework.

The following figure illustrates all the hypotheses developed in preceding sections in the form of a proposed conceptual model. The five variables on the left represent the various AMCs (stimuli), postulated to positively influence consumers' affective states (signified by pleasure, arousal and dominance), which in turn may impact fashion repurchase intentions (response).

It should be noted that any subsequent references made to 'exogenous' variables refer to the five AMCs (arrows going out from the construct), and any mentions about endogenous variables denote the three emotional states and repurchase intentions (arrows coming into the construct) (Hair *et al.*, 2014).

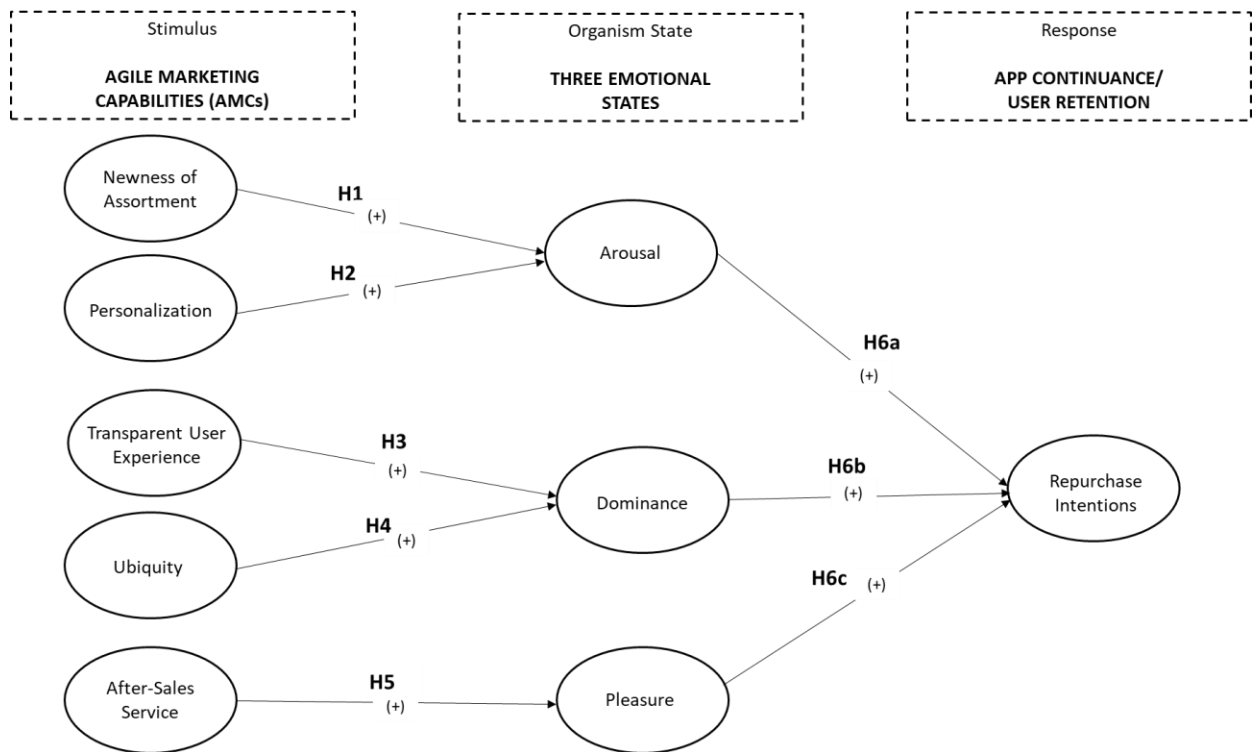


Figure 1: Proposed conceptual framework